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FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 16:33:18 ON 28 JUN 2001

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=> s hepatitis(w)B

L1 47079 HEPATITIS(W) B

=> s interferon?

L2 81306 INTERFERON?

 \Rightarrow s 11 and 12

L3 3852 L1 AND L2

=> s lamivudine

L4 1606 LAMIVUDINE

=> s 13(P)14

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH FIELD CODE - 'AND' OPERATOR ASSUMED 'L9 (P)L13' PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH FIELD CODE - 'AND' OPERATOR ASSUMED 'L10(P)L14' PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH FIELD CODE - 'AND' OPERATOR ASSUMED 'L11(P)L15' L5 135 L3(P) L4

=> s 13 and 14

L6 135 L3 AND L4

=> s adefovir

L7 154 ADEFOVIR

=> s 17 and 13

L8 15 L7 AND L3

=> s entecavir

L9 4 ENTECAVIR

=> s 19 and 13

=> d 110 1-2 bib ab

L10 ANSWER 1 OF 2 MEDLINE 2001136209 MEDLINE ΑN 20535646 PubMed ID: 11085196 DN TIClinical potential of emerging new agents in hepatitis B ΑU Farrell G C Department of Medicine, University of Sydney at Westmead Hospital, New CS South Wales, Australia.. geoff_farrell@wmi.usyd.edu.au DRUGS, (2000 Oct) 60 (4) 701-10. Ref: 60 SO Journal code: EC2; 7600076. ISSN: 0012-6667. CY New Zealand יית Journal; Article; (JOURNAL ARTICLE) General Review; (REVIEW) (REVIEW, TUTORIAL) LA English FS Priority Journals EM 200103 Entered STN: 20010404 ED Last Updated on STN: 20010404 Entered PubMed: 20010223 Entered Medline: 20010301 AΒ Treatment of chronic hepatitis B is directed at interrupting the natural history and clinical outcomes of the disease. It needs to take into account the virology and replication cycle of the hepatitis B virus (HBV), and the host immune response to HBV. Long term follow-up of patients treated with interferon supports the paradigm that a sustained, major suppression of HBV replication, particularly that associated with hepatitis B e antigen (HBeAg) seroconversion, interrupts the natural history of hepatitis B. The availability of potent but well tolerated and orally available HBV antivirals, of which lamivudine is the prototype, has allowed clearer treatment objectives to be formulated. These are: temporary or permanent reduction of hepatitis (necroinflammatory) activity, arrest of fibrotic progression, prevention of cirrhosis and liver failure, and prevention of recurrent HBV infection after liver transplantation. Lamivudine has good medium term efficacy in achieving each of these objectives. The only significant problem for the longer term is emergence of antiviral resistance conferred by mutations in the YMDD (tyrosine-methionine-aspartic acid-aspartic acid) motif of the HBV reverse transcriptase. As a result, contentious issues remain about defining when antiviral therapy is indicated, whether to treat for a defined interval or indefinitely, and when to stop treatment if HBeAg seroconversion is not achieved. Some personal views are expressed in this review. Among newer HBV antivirals in clinical studies, adefovir dipivoxil, entecavir and emtricitabine appear to be at least as potent as lamivudine in suppressing HBV replication. Famciclovir appears less potent. In vitro studies show that YMDD mutations confer cross-resistance between lamivudine, emtricitabine and beta-L-Fd4C (L-2',3'-didehydro-dideoxy-5-fluorocytidine). However, adefovir dipivoxil,

lobucavir, entecavir, DAPD (beta-D-2,6-diaminopurine dioxolane) and possibly clevudine (L-FMAU) suppress replication of YMDD mutant HBV, as well as wildtype. Preliminary studies indicate clinical efficacy of adefovir dipivoxil once resistance to lamivudine has developed. Immunomodulatory approaches to treatment of chronic hepatitis B are conceptually attractive, but newer agents used to date (thymalfasin, interleukin-12, therapeutic vaccines) have not demonstrated sufficient efficacy for widespread use. The next challenge for HBV

treatment is to be antivirals in combination and r in cyclical therapy to reduce the expense of drug resistance and in ease efficacy, particularly to achieve sustainable post-treatment suppression of hepatitis B.

L10 ANSWER 2 OF 2 MEDLINE AN 2000154339 MEDLINE

DN 20154339 PubMed ID: 10689749

TI [New developments in therapy of chronic hepatitis B. When are nucleoside analogs indicated?].

Neue Entwicklungen in der Therapie der chronischen Hepatitis B. Wann sind Nukleosidanaloga indiziert?.

AU Petry W; Erhardt A; Heintges T; Haussinger D

CS Klinik fur Gastroenterologie, Hepatologie und Infektiologie, Heinrich-Heine-Universitat Dusseldorf.

SO ZEITSCHRIFT FUR GASTROENTEROLOGIE, (2000 Jan) 38 (1) 77-87. Ref: 61 Journal code: XU1; 0033370. ISSN: 0044-2771.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(REVIEW, TUTORIAL)

LA German

FS Priority Journals

EM 200003

ED Entered STN: 20000330 Last Updated on STN: 20000330 Entered Medline: 20000322

AB Nucleoside analogues are promising agents for the treatment of chronic hepatitis B infection (HBV-DNA-positive by hybridization assay). The drug being studied most intensively is Lamivudine (Zeffix) which has recently been approved in Germany. When given orally once daily (100 mg) Lamivudine is well-tolerated and suppresses HBV-DNA to undetectable levels in the majority of patients. Since relapse is frequent

when medication is stopped long-term treatment (at least until seroconversion of HBeAg) is warranted. Indications for lamivudine monotherapy are patients with chronic hepatitis B in which interferon (IFN) is contraindicated or patients who did not respond to a previous course of interferon. Further indications are the HBV-DNA-positive cirrhosis prior to liver transplantation (OLT) and the HBV-reinfection after OLT. The main problem of long-term monotherapy with lamivudine is viral resistance. The clinical

impact of the resistant mutants is often not clear. Withdrawal or even continuation of the medication may be acceptable approaches. Other nucleoside analogues like **Entecavir** or Adefovir are currently being tested in clinical studies. Famciclovir was investigated preferably in patients with decompensated liver disease or HBV-reinfection after

Because of conflicting results the drug should only be used under study conditions. In IFN-naive patients with chronic hepatitis

B (and compensated liver disease) alpha-interferon is still the first-line therapy. With a standard course of interferon 30-40% of the patients become seronegative for HBeAg as compared with 16-17% when treated with lamivudine for twelve months. Combination of lamivudine and interferon is not more effective than IFN alone. In the future combined antiviral treatment is likely to replace monotherapy.

=> d 18 1-15 bib ab

OLT.

L8 ANSWER 1 OF 15 MEDLINE AN 2001188982 MEDLINE

```
21175123
                PubMed ID: 11279893
     [Current treatment of hepatitis B].
Tratamiento actuar de la hepatitis B.
     Suarez Garcia E; Romero Gomez M; Grande Santamaria L
ΑU
     Seccion de Aparato Digestivo, Hospital Universitario de Valme, Sevilla.
CS
     GASTROENTEROLOGIA Y HEPATOLOGIA, (2001 Feb) 24 Suppl 1 35-50.
     Journal code: CE5; 8406671. ISSN: 0210-5705.
CY
     Spain
DT
     Journal; Article; (JOURNAL ARTICLE)
LΑ
     Spanish
     Priority Journals
FS
     200104
EΜ
     Entered STN: 20010502
ED
     Last Updated on STN: 20010502
     Entered PubMed: 20010330
     Entered Medline: 20010426
L8
     ANSWER 2 OF 15 MEDLINE
     2001136209
                    MEDLINE
AN
DN
     20535646 PubMed ID: 11085196
ΤI
     Clinical potential of emerging new agents in hepatitis B
ΑU
     Department of Medicine, University of Sydney at Westmead Hospital, New
CS
     South Wales, Australia. geoff_farrell@wmi.usyd.edu.au DRUGS, (2000 Oct) 60 (4) 701-10. Ref: 60
SO
     Journal code: EC2; 7600076. ISSN: 0012-6667.
CY
     New Zealand
DT
     Journal; Article; (JOURNAL ARTICLE)
     General Review; (REVIEW)
     (REVIEW, TUTORIAL)
LΑ
     English
FS
     Priority Journals
EM
     200103
ED
     Entered STN: 20010404
     Last Updated on STN: 20010404
     Entered PubMed: 20010223
     Entered Medline: 20010301
AΒ
     Treatment of chronic hepatitis B is directed at
     interrupting the natural history and clinical outcomes of the disease. It
     needs to take into account the virology and replication cycle of the
     hepatitis B virus (HBV), and the host immune response to
     HBV. Long term follow-up of patients treated with interferon
     supports the paradigm that a sustained, major suppression of HBV
     replication, particularly that associated with hepatitis
     B e antigen (HBeAg) seroconversion, interrupts the natural history
     of hepatitis B. The availability of potent but well
     tolerated and orally available HBV antivirals, of which lamivudine is the
     prototype, has allowed clearer treatment objectives to be formulated.
     These are: temporary or permanent reduction of hepatitis
     (necroinflammatory) activity, arrest of fibrotic progression, prevention
     of cirrhosis and liver failure, and prevention of recurrent HBV infection
     after liver transplantation. Lamivudine has good medium term efficacy in
     achieving each of these objectives. The only significant problem for the
     longer term is emergence of antiviral resistance conferred by mutations
in
     the YMDD (tyrosine-methionine-aspartic acid-aspartic acid) motif of the
```

the YMDD (tyrosine-methionine-aspartic acid-aspartic acid) motif of the HBV reverse transcriptase. As a result, contentious issues remain about defining when antiviral therapy is indicated, whether to treat for a defined interval or indefinitely, and when to stop treatment if HBeAg seroconversion is not achieved. Some personal views are expressed in this review. Among newer HBV antivirals in clinical studies, adefovir dipivoxil, entecavir and emtricitabine appear to be at least as potent as lamivudine in suppressing HBV replication. Famciclovir appears less potent. In vitro studies show that YMDD mutations confer cross-resistance

between lamivuding, emtricitabine and beta-L-Fd4C (L-2',3'-didehydro-dideoxy-5-fluor tidine). However, adefovir dip kil, lobucavir, entecavir, DAPD (beta-D-2,6-diaminopurine dioxolane) and possibly clevudine (L-FMAU) suppress replication of YMDD mutant HBV, as well as wildtype. Preliminary studies indicate clinical efficacy of adefovir dipivoxil once resistance to lamivudine has developed. Immunomodulatory approaches to treatment of chronic hepatitis

B are conceptually attractive, but newer agents used to date (thymalfasin, interleukin-12, therapeutic vaccines) have not demonstrated sufficient efficacy for widespread use. The next challenge for HBV treatment is to use antivirals in combination and/or in cyclical therapy to reduce the emergence of drug resistance and increase efficacy, particularly to achieve sustainable post-treatment suppression of hepatitis B.

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hepatitis B.
     ANSWER 3 OF 15 MEDLINE
L8
ΑN
     2000513349
                     MEDLINE
     20522359
               PubMed ID: 11070570
DN
     Chronic viral hepatitis.
TΙ
ΑU
     Alexander G; Walsh K
     Department of Medicine, Addenbrooke's Hospital, Cambridge, UK.
CS
     INTERNATIONAL JOURNAL OF CLINICAL PRACTICE, (2000 Sep) 54 (7) 450-6.
SO
Ref:
     92
     Journal code: CVT. ISSN: 1368-5031.
CY
     ENGLAND: United Kingdom
DT
     Journal; Article; (JOURNAL ARTICLE)
     General Review; (REVIEW)
     (REVIEW, TUTORIAL)
     English
LΑ
     Priority Journals
FS
EM
     200011
ED
     Entered STN: 20010322
     Last Updated on STN: 20010322
     Entered Medline: 20001120
     Both hepatitis B and hepatitis C are spread
AΒ
     parenterally. Chronic hepatitis C is fast becoming the leading indication
     for liver transplantation. Most infected patients go on to develop
chronic
     hepatitis, with approximately 20% developing liver cirrhosis or
     hepatocellular carcinoma after 20 years. Standard treatment now is with a
     combination of alpha-interferon and ribavirin, which is
     successful in up to 40% of patients. A vaccine is still a remote
     possibility and prevention remains all-important. Despite having a
     successful vaccine, chronic \ensuremath{\mathbf{hepatitis}}\ \ensuremath{\mathbf{B}}\ \ensuremath{\mathsf{remains}}\ \ensuremath{\mathsf{an}}
     important cause of liver cirrhosis and hepatocellular carcinoma.
     Treatments for active hepatitis include alpha-interferon and the
     newer nucleoside analogues such as lamivudine and adefovir. In
     patients undergoing liver transplantation, recurrence of hepatitis
     B in the graft can be reduced with a combination of
     hepatitis B immunoglobulin and these nucleoside
     analogues.
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L8 ANSWER 4 OF 15 MEDLINE
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AN 2000474693 MEDLINE

DN 20392635 PubMed ID: 10936954

TI [Diagnosis and treatment of **hepatitis B**].
Diagnostico e tratamento da hepatite B.

AU Ferreira M S

CS Disciplina de Doencas Infecciosas e Parasitarias, Universidade Federal de Uberlandia, MG, Brasil.

SO REVISTA DA SOCIEDADE BRASILEIRA DE MEDICINA TROPICAL, (2000 Jul-Aug) 33 (4) 389-400. Ref: 50 Journal code: RET; 7507456. ISSN: 0037-8682.

CY Brazil

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Journal; Article (JOURNAL ARTICLE)
     General Review;
                       VIEW)
     (REVIEW, TUTORIAL)
     Portuguese
LA
     Priority Journals
FS
     200010
EM
     Entered STN: 20001012
     Last Updated on STN: 20001012
     Entered Medline: 20001003
     Hepatitis B constitutes a serious public health
AB
     problem. It has been estimated that 350 million people--approximately 5%
     of the world population--have been infected by this virus. Of the people
     infected, in 90% to 95% of them there will be a spontaneous resolution of
     the disease. In 5% to 10% of the cases, though, the infection will
     and a chronic hepatitis will develop that may evolve leading, in the end,
     to liver cirrhosis, liver failure and/or carcinoma of the liver. The
     diagnosis of the different stages of the disease (i.e., acute, chronic
     infection) is performed using modern serologic techniques. Physicians,
     more recently, are having access to a series of laboratory tests which
     permit them to evaluate the viral load, replication of the virus and to
     testing of the efficacy of new anti-viral drugs. For the treatment of
     chronic hepatitis B new agents have been tested and
     some are being used with different degrees of success, such as, alfa-
     interferon, lamivudine, famciclovir, and adefovir
     dipivoxil, among others. Active immunization, using modern recombinant
     vaccines, are lately, the most important instrument of control of the
     infection caused by the hepatitis B virus.
     ANSWER 5 OF 15 MEDLINE
L8
                   MEDLINE
AN
     2000324752
     20324752 PubMed ID: 10868900
DN
TI
     Antiviral chemotherapy for the treatment of hepatitis B
     virus infections.
ΑU
     Torresi J; Locarnini S
     Victorian Infectious Diseases Reference Laboratory, North Melbourne,
CS
     Australia.
     GASTROENTEROLOGY, (2000 Feb) 118 (2 Suppl 1) S83-103. Ref: 194
SO
     Journal code: FH3; 0374630. ISSN: 0016-5085.
CY
     United States
     Journal; Article; (JOURNAL ARTICLE)
DT
     General Review; (REVIEW)
     (REVIEW, TUTORIAL)
LΑ
     English
     Abridged Index Medicus Journals; Priority Journals
FS
     200007
EM
     Entered STN: 20000714
ED
     Last Updated on STN: 20000714
     Entered Medline: 20000706
     Approximately 5% of the world's human population have an increased risk
AΒ
     for developing liver cancer and cirrhosis as a direct consequence of
     chronic infection with the hepatitis B virus (HBV).
     Antiviral chemotherapy remains the only option for controlling infection
     in these individuals, for whom the current licensed hepatitis
     B vaccines provide no benefit. Interferon (IFN)-alpha
     has proven benefit in a well-defined group of those with hepatitis
     B but has made little impact on the global burden of chronic liver
     disease. The development of more effective chemotherapy for treatment of
     chronic hepatitis B infection has proven to be
     extremely challenging, the result of both virus- and host-dependent
     factors, which will be reviewed in this article. Past attempts to treat
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chronic hepatitis B infection using nucleoside

analogues were disappointing, but more recently, several nucleoside (or nucleotide) analogues have been identified that are potent and selective

inhibitors of HBV replication. These agents fall into two broad

categories: (1) pucleoside/nucleotides that have modified sugar residues in either cyclic acyclic configurations and (stereoisomers of nucleosides in the "unnatural" L-configuration. Or the analogues that have been used clinically, representatives of the first category are purine derivatives, e.g., adefovir dipivoxil and famciclovir, whereas representatives of the second category are pyrimidine derivatives, such as lamivudine. ANSWER 6 OF 15 MEDLINE L8 AN 2000192814 MEDLINE 20192814 PubMed ID: 10730571 DN TI Therapy of chronic viral hepatitis: a critical view. ΑU Rizzetto M Department of Gastroenterology, University of Turin, Italy. CS ITALIAN JOURNAL OF GASTROENTEROLOGY AND HEPATOLOGY, (1999 Nov) 31 (8) SO 781-93. Ref: 127 Journal code: CVR; 9711056. ISSN: 1125-8055. CY Italy Journal; Article; (JOURNAL ARTICLE) DTGeneral Review; (REVIEW) (REVIEW LITERATURE) LΑ English FS Priority Journals EM 200004 Entered STN: 20000413 ED Last Updated on STN: 20000413 Entered Medline: 20000405 Many oral nucleoside analogues that are potent inhibitors of AB hepatitis B virus have recently been developed for the treatment of hepatitis B. The problems with these drugs are bioavailability, toxicity and the time-dependent emergence of resistant hepatitis B virus mutants. Lamivudine appears to be the most useful in terms of clinical benefit, safety and tolerance. It is active on wild type hepatitis B virus as well as on HBeAq-minus variants of the virus. However, although hepatitis B virus is consistently repressed while on therapy, only a minority of patients are cured or remain in remission after Lamivudine withdrawal. Maintenance therapy would appear to be in order, but the long-term use of Lamivudine is precluded by the emergence of polymerase gene-mutants which may rekindle disease. Combination with other antivirals (Adefovir?) active also against Lamivudine escape mutants opens promising new prospects. There is, as yet, no valid therapy for chronic hepatitis D virus hepatitis. Attempts to improve the results of alpha-interferon therapy in chronic hepatitis C with new interferons, or the manipulation of interferon monotherapy so as to obtain the maximum results compatible with have not produced significantly better results than the classic protocols of alpha-interferon monotherapy. A more concrete improvement has been achieved by the combination of interferon with Ribavirin, with the overall rate of response increasing three times compared to interferon monotherapy. Anaemia, however, is a common additional side-effect induced by Ribavirin. Combination therapy has become the treatment of choice for interferon naive patients as well as for interferon relapses; it is not efficacious in patients who have not responded to interferon. rsANSWER 7 OF 15 MEDLINE

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ΑN
     2000154339
                   MEDLINE
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20154339 PubMed ID: 10689749 DN

[New developments in therapy of chronic hepatitis B. TIWhen are nucleoside analogs indicated?]. Neue Entwicklungen in der Therapie der chronischen Hepatitis

```
B. Wann sind Nukleosidanaloga indiziert?.

Petry W; Erhardt Heintges T; Haussinger D

Klinik fur Gastroenterologie, Hepatologie und Infektiologie,
ΑU
CS
     Heinrich-Heine-Universitat Dusseldorf.
     ZEITSCHRIFT FUR GASTROENTEROLOGIE, (2000 Jan) 38 (1) 77-87. Ref: 61
SO
     Journal code: XU1; 0033370. ISSN: 0044-2771.
     GERMANY: Germany, Federal Republic of
CY
     Journal; Article; (JOURNAL ARTICLE)
DT
     General Review; (REVIEW)
     (REVIEW, TUTORIAL)
LΑ
     German
FS
     Priority Journals
ΕM
     200003
ED
     Entered STN: 20000330
     Last Updated on STN: 20000330
     Entered Medline: 20000322
     Nucleoside analogues are promising agents for the treatment of chronic
AB
     hepatitis B infection (HBV-DNA-positive by hybridization
     assay). The drug being studied most intensively is Lamivudine (Zeffix)
     which has recently been approved in Germany. When given orally once daily
     (100 mg) Lamivudine is well-tolerated and suppresses HBV-DNA to
     undetectable levels in the majority of patients. Since relapse is
     when medication is stopped long-term treatment (at least until
     seroconversion of HBeAg) is warranted. Indications for lamivudine
     monotherapy are patients with chronic hepatitis B in
     which interferon (IFN) is contraindicated or patients who did
     not respond to a previous course of interferon. Further
     indications are the HBV-DNA-positive cirrhosis prior to liver
     transplantation (OLT) and the HBV-reinfection after OLT. The main problem
     of long-term monotherapy with lamivudine is viral resistance. The
clinical
     impact of the resistant mutants is often not clear. Withdrawal or even
     continuation of the medication may be acceptable approaches. Other
     nucleoside analogues like Entecavir or Adefovir are currently
     being tested in clinical studies. Famciclovir was investigated preferably
     in patients with decompensated liver disease or HBV-reinfection after
OLT.
     Because of conflicting results the drug should only be used under study
     conditions. In IFN-naive patients with chronic hepatitis
     B (and compensated liver disease) alpha-interferon is
     still the first-line therapy. With a standard course of interferon
     30-40% of the patients become seronegative for HBeAg as compared with
     16-17% when treated with lamivudine for twelve months. Combination of
     lamivudine and interferon is not more effective than IFN alone.
     In the future combined antiviral treatment is likely to replace
     monotherapy.
L8
     ANSWER 8 OF 15 MEDLINE
ΑN
     1999310004
                    MEDLINE
               PubMed ID: 10382631
DN
     99310004
     Update on clinical trials in the treatment of hepatitis
ΤI
AU /
     Pessoa M G; Wright T L
CS
     Department of Veterans Affairs Medical Center, University of California,
    San Francisco 94121, USA.

earrowJOURNAL OF GASTROENTEROLOGY AND HEPATOLOGY, (1999 May) 14 Suppl S6-11.
·SO
     Ref: 30
     Journal code: A6J; 8607909. ISSN: 0815-9319.
CY
     Australia
     Journal; Article; (JOURNAL ARTICLE)
DТ
     General Review; (REVIEW)
     (REVIEW LITERATURE)
```

LΑ

English

Priority Journals

199908 ΕM ED Entered STN: 19 B27 Last Updated on STN: 19990827 Entered Medline: 19990817 Chronic hepatitis B infection is a worldwide public AB health problem, which is particularly important in countries of Asia. Interferon has long been available for the treatment of patients with active replication (hepatitis B virus (HBV) e antigen and HBV-DNA positive) with evidence of chronic liver disease (elevated serum alanine aminotransferase and chronic hepatitis on liver biopsy). Doses of interferon of 10 MU, t.i.w. or 5 MU, q day for 16 weeks result in e antigen and HBV-DNA loss in approximately one-third of individuals who meet these treatment criteria. The major limitations οf interferon are: (i) side effects of influenza-like symptoms; (ii) need for parenteral administration; and (iii) concerns about safety in patients with hepatic decompensation. Nucleoside and nucleotide analogues have potent antiviral activity. The largest experience is with lamivudine (3-thiacytadine), a reverse transcriptase inhibitor that was recently approved by the USA Federal Drug Administration. At doses of 100 mg/day for 52 weeks, suppression of HBV replication is almost universal, with e antigen loss and improvement in histology being achieved in one-third and two-thirds of patients, respectively. The major advantages of lamivudine are: (i) good tolerability; (ii) oral route of administration; and (iii) safety in patients with hepatic decompensation. The major disadvantage is drug resistance, which is observed with increasing frequency following prolonged administration. New agents, such as adefovir dipivoxil, offer promise either alone or in combination with lamivudine in the treatment of individuals who are 'treatment naive' as well as in the treatment individuals who have developed lamivudine resistance. L8ANSWER 9 OF 15 MEDLINE AN 1998163425 MEDLINE 98163425 PubMed ID: 9504896 DN Review: Present and future directions in the treatment of chronic TI hepatitis B infection. ¿AŪ Nicoll A; Locarnini S Victorian Infectious Diseases Reference Laboratory, Fairfield Hospital, Victoria, Australia. (so) JOURNAL OF GASTROENTEROLOGY AND HEPATOLOGY, (1997 Dec) 12 (12) 843-54. Ref: 134 Journal code: A6J; 8607909. ISSN: 0815-9319. CY Australia Journal; Article; (JOURNAL ARTICLE) DТ General Review; (REVIEW) (REVIEW, TUTORIAL) LА English FS Priority Journals ΕM 199804 ED Entered STN: 19980507 Last Updated on STN: 19980507 Entered Medline: 19980430 The last decade has witnessed substantial progress in the development of AB

chemotherapeutic agents for chronic hepatitis B.

on the hepatitis B virus hepatocyte interaction.

clinical

However, the only currently licensed treatment in Australia, interferon-alpha, has low initial response rates and the adverse effects are often unacceptable. Of the newer agents in the class of nucleoside analogues, famciclovir and lamivudine are in phase III

bis-POM PMEA (Adefovir), are at phase I/II development. Future

trials with encouraging preliminary results, while other agents, such as

approaches to therapy will be governed by an understanding of the effects of nucleoside analogues on the natural history of the disease as well as

Combination antimiral therapy should theoretical offer improved response rates, decrease the development of viral resistance, and provide the greatest reduction in viral load, but it has not yet been widely examined in the clinical setting. In this article, we review the currently available strategies, discuss potential problem areas, and speculate on promising approaches with combination chemotherapy and the features of agents soon to be trialed. ANSWER 10 OF 15 USPATFULL L8 ΑN 2001:90260 USPATFULL Fatty acid-pharmaceutical agent conjugates TIWebb, Nigel L., Bryn Mawr, PA, United States IN Bradley, Matthews O., Laytonsville, MD, United States Swindell, Charles S., Merion, PA, United States Shashoua, Victor E., Brookline, MA, United States US 2001002404 Al 20010531 PΙ US 2000-730450 A1 20001205 (9) ΑI Continuation of Ser. No. US 1996-651428, filed on 22 May 1996, RLI ABANDONED DTUtility Edward R. Gates, Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, LREP Boston, MA, 02210 Number of Claims: 12 CLMN ECLExemplary Claim: 1 DRWN 14 Drawing Page(s) LN.CNT 2511 The invention provides conjugates of fatty acids and pharmaceutical AΒ agents useful in treating noncentral nervous system conditions. Methods for selectively targeting pharmaceutical agents to desired tissues are provided. ANSWER 11 OF 15 USPATFULL L82001:33274 USPATFULL AN Synthesis, anti-human immunodeficiency virus, and anti-hepatitis TIB virus activities of 1,3-oxaselenolane nucleosides IN Schinazi, Raymond F., Decatur, GA, United States Chu, Chung K., Athens, GA, United States Du, Jinfa, Irvine, CA, United States Emory University, Atlanta, GA, United States (U.S. corporation) PΑ The University of Georgia Research Foundation, Inc., Athens, GA, United States (U.S. corporation) US 6197777 B1 20010306 US 2000-517955 20000303 (9) PΙ ΑI Division of Ser. No. US 1998-44558, filed on 19 Mar 1998, now patented, RLI Pat. No. US 6071922 PRAI US 1997-41265 19970319 (60) DΤ Utility Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom EXNAM Knowles, Esq., Sherry M.King & Spalding LREP CLMN Number of Claims: 23 Exemplary Claim: 1 ECL DRWN 14 Drawing Figure(s); 4 Drawing Page(s) LN.CNT 1668 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A method and composition for the treatment of HIV infection, HBV

AB A method and composition for the treatment of HIV infection, HBV infection, or abnormal cellular proliferation in humans and other host animals is disclosed that includes the administration of an effective amount of a 1,3-oxaselenolane nucleoside or a pharmaceutically acceptable salt thereof, optionally in a pharmaceutically acceptable carrier.

L8 ANSWER 12 OF 15 USPATFULL AN 2001:29543 USPATFULL

```
3'-azido-2',3'_dideoxyuridine administration to reat HIV and related
TΙ
       test protocol
IN
       Schinazi, Raymond F., Decatur, GA, United States
       Bryant, Martin L., Carlisle, MA, United States
       Myers, Maureen W., Carlisle, MA, United States
       Emory University, Atlant, GA, United States (U.S. corporation)
PΑ
       Norvirio Pharmaceuticals Limited, Grand Cayman, Cayman Islands
(non-U.S.
       corporation)
ΡI
       US 6194391 B1 20010227
ΑI
      US 1999-339133 19990624 (9)
PRAI
      US 1998-90552
                           19980624 (60)
      US 1999-132126
                           19990430 (60)
DT
       Utility
EXNAM
      Primary Examiner: Killos, Paul J.; Assistant Examiner: Crane, L. E.
       Knowles, Sherry M.King & Spalding
CLMN
      Number of Claims: 32
ECL
      Exemplary Claim: 1,10,11
DRWN
       9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2273
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       It has been discovered that 3'-azido-2',3'-dideoxyuridine (CS-87)
       induces a transient mutation in HIV-1 at the 70.sup.th codon (K to R,
       i.e., lysine to arginine) of the reverse transcriptase region of the
       virus. Based on this discovery, a method and composition for treating
       HIV is provided that includes administering CS-87 or its
       pharmaceutically acceptable salt or prodrug to a human in need of
       therapy in combination or alternation with a drug that induces a
      mutation in HIV-1 at a location other than the 70.sup.th codon of the
      reverse transcriptase region. This invention can be practiced by
       referring to the published mutation patterns for known anti-HIV drugs,
       or by determining the mutation pattern for a new drug.
    ANSWER 13 OF 15 USPATFULL
L8
ΑN
       2000:70851 USPATFULL
TI
       Synthesis, anti-human immunodeficiency virus, and anti-hepatitis
     B virus activities of 1,3-oxaselenolane nucleosides
       Schinazi, Raymond F., Decatur, GA, United States
IN
       Chu, Chung K., Athens, GA, United States
       Du, Jinfa, Irvine, CA, United States
PA
       Emory University, Atlanta, GA, United States (U.S. corporation)
       The University of Georgia Research Foundation, Inc., Athens, GA, United
       States (U.S. corporation)
PΙ
       US 6071922 20000606
ΑI
      US 1998-44558 19980319 (9)
PRAI
      US 1997-41265
                           19970319 (60)
DT
       Utility
EXNAM
      Primary Examiner: Raymond, Richard L.; Assistant Examiner: Truong,
       Tamthom N.
LREP
       Knowles, Sherry M., Haley, JacquelineKing & Spalding
CLMN
      Number of Claims: 49
ECL
       Exemplary Claim: 1
       4 Drawing Figure(s); 4 Drawing Page(s)
DRWN
LN.CNT 1780
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method and composition for the treatment of HIV infection, HBV
AB
       infection, or abnormal cellular proliferation in humans and other host
       animals is disclosed that includes the administration of an effective
       amount of a 1,3-oxaselenolane nucleoside or a pharmaceutically
       acceptable salt thereof, optionally in a pharmaceutically acceptable
       carrier.
L8
     ANSWER 14 OF 15 USPATFULL
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1998:98932 USPATFULL

DHA-pharmaceutical agent conjugates of taxanes

ΑN

TΙ

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Shashoua, Victor E., Brookline, MA, United State Swindell, Cha S., Merion, PA, United State
IN
       Webb, Nigel L., Bryn Mawr, PA, United States
       Bradley, Matthews O., Laytonsville, MD, United States
       Neuromedica, Inc., Conshohocken, PA, United States (U.S. corporation)
PΑ
ΡI
       US 5795909 19980818
ΑI
       US 1996-651312 19960522 (8)
DT
       Utility
EXNAM
      Primary Examiner: Jarvis, William R. A.
       Wolf, Greenfield & Sacks, P.C.
LREP
CLMN
       Number of Claims: 12
       Exemplary Claim: 1
ECL
       27 Drawing Figure(s); 14 Drawing Page(s)
DRWN
LN.CNT 2451
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention provides conjugates of cis-docosahexaenoic acid and
AB
       taxanes useful in treating cell proliferative disorders. Conjugates of
       paclitaxel and docetaxel are preferred.
     ANSWER 15 OF 15 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
L8
AN
     2000-490988 [43]
                        WPIDS
DNC C2000-147537
     Treatment and prevention of hepatitis B virus
ΤI
     infection, using an antiviral agent and a vaccine in simultaneous or
     sequential use.
DC
     A96 B04 B05 D16
     ATKINSON, G F; BOON, R J; VANDEPAPELIERE, P G; WETTENDORFF, M A C
ΙN
     (SMIK) SMITHKLINE BEECHAM BIOLOGICALS
PΑ
CYC
ΡI
     WO 2000041463 A2 20000720 (200043) * EN
                                               18p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
            OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES
            FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
            LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
            TJ TM TR TT UA UG US UZ VN YU ZA ZW
     AU 2000021009 A 20000801 (200054)
    WO 2000041463 A2 WO 1999-EP10295 19991221; AU 2000021009 A AU 2000-21009
ADT
     19991221
FDT AU 2000021009 A Based on WO 200041463
PRAI GB 1999-630
                      19990112
     WO 200041463 A UPAB: 20000907
     NOVELTY - Pharmaceutical pack comprising an antiviral agent active
against
     hepatitis B virus (HBV), and a vaccine for the
     prophylaxis and/or treatment of hepatitis B infection,
     for simultaneous or sequential use, is new.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
          (1) treating a patient suffering from or susceptible to HBV
     infection, comprising administering either simultaneously or sequentially
     in any order, an antiviral agent active against HBV, and a vaccine for
the
     prophylaxis and/or treatment of hepatitis B infection;
          (2) use of an antiviral compound in the manufacture of a medicament
     for the treatment of patients already primed with a hepatitis
     B vaccine or an antiviral compound, and suffering from a HBV
     infection; and
          (3) use of a hepatitis B vaccine in the
     manufacture of a medicament for the treatment of patients already primed
     with an antiviral compound and suffering from a HBV infection.
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ACTIVITY - Antiviral; hepatotropic; antinflammatory; immunostimulatory.

MECHANISM OF ACTION - Vaccine.

USE - The pharmaceuticles can be used to treat and prevent

hepatitis B inferiors.
Dwg.0/0